

**REMARKS**

5       Applicant respectfully requests further examination and reconsideration in view of the above amendments and arguments set forth fully below. Claims 13-20 were previously pending in this application. By way of the above amendment, Claim 16 has been canceled, Claims 13, 17, and 20 have been amended and new Claim 21 has been added. Accordingly, Claims 13-15, 17-20, and 22 are now pending in this application.

**Objection to Specification:**

10       Within the Office Action the Specification has been objected to for an informality. Specifically, the word “heath” on page 2, line 16, should be “health.” By way of the above amendment, “heath” on page 2, line 16, has been changed to “health.”

**Rejections Under 35 U.S.C. § 102(b)**

15       Within the Office Action, Claims 13-20 have been rejected under 35 U.S.C. § 102(b) as being anticipated by an article titled “DETERMINING THE ENERGY DENSITY THRESHOLD FOR ABLATION OF BACTERIA- A VITRO STUDY,” by Coffelt et al. (hereafter “Coffelt et al.”).

20       Coffelt et al. teach a method of determining the energy density threshold for ablating bacteria. In the method of Coffelt et al., dentin samples are contaminated with a bacteria and treated with a range of laser exposures. Bacteria cultures are then regrown from the treated dentin samples and the dentin samples are examined under a microscope. By examining the regrown cultures and visual damage to the dentin sample, a threshold laser exposure can be determined, whereby the maximum amount of the bacteria is irradiated while minimizing the 25 damage to the dentin samples.

30       The present invention is directed to a method of developing dosimetry for laser treatment of both hard and soft periodontal tissues within an oral cavity. In stark contrast to the teachings of Coffelt et al., a treatment protocol for laser treatment of the periodontal tissues having the pathogen is developed by exposing the pathogen with a range of laser exposures in a target medium other than that of the periodontal tissues. Eradication of the pathogen is monitored to determine an ablation threshold of the pathogen within the target medium. From the ablation threshold and a known response of the periodontal tissues to the range of laser exposures, a therapeutic ratio can be calculated using correlation and modeling techniques. The therapeutic ratio can then be used to select a treatment protocol for the periodontal tissues having the

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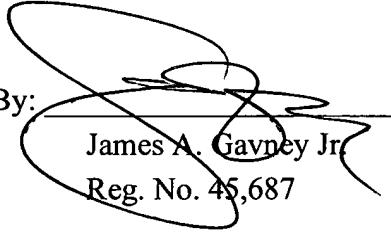
pathogen. These features are neither taught nor suggested by the teachings of Coffelt et al. For at least this reason, the independent Claim 13 is allowable over the teachings of Coffelt et al.

By way of the above amendment, Claim 16 has been canceled. The remaining Claims 14, 15 and 17-20 are all dependent on the independent Claim 13. As described above, the 5 independent Claim 13 is allowable over the teachings of Coffelt et al. Accordingly, Claims 14, 15 and 17-20 are also all allowable as being dependent on an allowable base claim.

The new Claim 22 recites monitoring the pathogen for ablation by measuring sound using an audio detector. This feature is also neither taught nor suggested by the teachings of Coffelt et al.

10 For the reasons given above, Applicant respectfully submits that Claims 13-15, 17-20 and 22 are now in condition for allowance, and allowance at an early date would be appreciated. Should the Examiner have any questions or comments, the Examiner is encouraged to call the undersigned at (408) 530-9700 to discuss them so that any outstanding issues can be expeditiously resolved.

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Respectfully submitted,  
HAVERSTOCK & OWENS LLP

20 Dated: 12/17/05  
By:   
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Agent for Applicant(s)

CERTIFICATE OF MAILING (37 CFR 1.8(e))

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450

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